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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,876	07/12/2007	Mark Vanderbeken	2414-103	5939
32084 VERMETTE &	7590 05/19/201 c <b>CO</b> .	EXAMINER		
SUITE 320 - 1177 WEST HASTINGS STREET VANCOUVER, BC V6E2K3			YUSUF, MOHAMMAD I	
VANCOUVER CANADA	, BC V6E2K3		ART UNIT	PAPER NUMBER
			3725	
			MAIL DATE	DELIVERY MODE
			05/19/2010	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/599,876	VANDERBEKEN, MARK				
Office Action Summary	Examiner	Art Unit				
	MOHAMMAD YUSUF	3725				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>01 M</u>	arch 2010					
<del>/_</del>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
·	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under Ex parte Quayle, 1000 C.D. 11, 400 C.C. 210.						
Disposition of Claims						
4)⊠ Claim(s) <u>1,14 and 27-50</u> is/are pending in the a	☑ Claim(s) <u>1,14 and 27-50</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,14,27-33 and 36-50</u> is/are rejected.						
7)⊠ Claim(s) <u>34 and 35</u> is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
,—	•					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	te				

Art Unit: 3725

#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments with respect to claim 1, 14, 27-33 and 36-50 have been considered but are most in view of the new ground(s) of rejection.

## Claim Objections

2. Claims 34-35 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 34-35 do not recite any limitation.

### Specification

3. The amendment filed 03/01/2010 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: page 3 of the amendment to specification contains new disclosure "two opposing first and second roller track sides". Applicant defines first roller track side as being formed by metal sheet 30, but metal sheet 30 is situated on both top and bottom side of the roller track 160 in

Art Unit: 3725

figure 6b. Figure 6b and its disclosure from the original disclosure does not support top metal sheet 30 adjacent to portion 46 as the currently defined first roller track side.

Applicant is required to cancel the new matter in the reply to this Office Action.

Examiner advices the applicant to redefine the first roller track side as being formed by vertical portion of the metal sheet 30 adjacent to bend 42 opposing a second roller track side formed by a vertical portion 48.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1, 14, 27-33 and 38-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over McFatter (US 4,074,847) in view of Bachhofer (DE 19939180; and DERWENT English Abstract).

In regard to **claim 1**, McFatter discloses a method for manufacturing a circular metal tank comprising :

providing an elongated sheet of metal [fig. 1, coiled strip 30]

bending said sheet of metal along an upper longitudinal edge thereof to produce a first bend [figures 3 and 4];

moving said sheet of metal in a helical trajectory such that said second bend comes into proximity above said first bend [column 3 lines 30-50]; and

welding the second edge to said first bend to form a wall of said tank, said wall having a continuous, helical weld [column 3 lines 30-55];

wherein said first bend and second edge cooperate to form a helical roller track [30c] on an outside of said tank [figure 7]; and wherein said tank is supported on a plurality of rollers [43, 45a and 45b] that engage said roller track; and wherein said tank is rotated [by drive mechanism 47 and 49] about its longitudinal axis on said rollers [45a and 45b] such that said tank moves upwards as said sheet of metal is welded to a bottom thereof.

McFatter discloses the claimed invention substantially, but he does not disclose bending the lower edge to a second bend.

However, However, Bachhofer discloses (DE19939180 DERWENT Abstract, title, lines 7-10) a cylinder container tank formed by sheet strip and the sheet strip is spirally formed where the both edges are bent and folded and are welded at the butt line (Fig. 3a and Fig. 3b).

It would have been obvious for one having ordinary skill in the art at the time the invention was made to modify McFatter by bending the bottom edge and folding it with the first bent of top edge before welding as disclosed by Bachhofer in order to provide more stability to the joints with the folds, in addition to the welding, against liquid penetration.

Since McFatter already discloses a roller track 30c which is a cooperation between bottom edge and first bend [McFatter fig. 5]. After modification, the roller track of McFatter would look like the fold 25 which is a cooperation between first and second bends [Bachhofer, fig. 3b].

In regard to **claim 14**, McFatter discloses a decoiler [fig. 1, 30 and 32], a bender/corrugator for first bend [36b, figs. 3 and 4], a support system having rollers for moving the sheet metal along a helical trajectory [43, and rollers 45a and 45b, fig. 7], a welding positioner and welder [column 3 lines 30-50].

McFatter discloses the claimed invention substantially, but he does not disclose a bender for bending the lower edge to a second bend.

However, However, Bachhofer discloses (DE19939180 DERWENT Abstract, title, lines 7-10) a cylinder container tank formed by sheet strip and the sheet strip is spirally formed where the both edges are bent and folded and are welded at the butt line (Fig. 3a and Fig. 3b; bended by benders 9 and 10 of fig. 2).

It would have been obvious for one having ordinary skill in the art at the time the invention was made to modify McFatter by bending the bottom edge and folding it with the first bent of top edge before welding as disclosed by Bachhofer in order to provide more stability to the joints with the folds, in addition to the welding, against liquid penetration.

Since McFatter already discloses a roller track 30c which is a cooperation between bottom edge and first bend [McFatter fig. 5]. After modification, the roller track

of McFatter would look like the fold 25 which is a cooperation between first and second bends [Bachhofer, fig. 3b].

In regard to **claim 27**, McFatter discloses a method for manufacturing a circular metal tank wall from an elongate metal sheet, wherein said metal sheet has an upper edge, said method comprising the steps of:

providing the elongated metal sheet [fig. 1, coiled strip 30];

bending an upper edge of the metal sheet to produce an upper bend along the upper edge [figures 3 and 4];

aligning the lower bend into proximity with the upper bend [column 3 lines 30-50]; welding the upper edge of the metal sheet to the lower edge of the metal sheet to form the circular tank wall [column 3 lines 30-55],

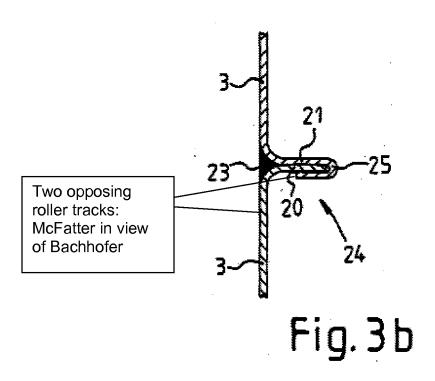
McFatter discloses the claimed invention substantially, but he does not disclose bending the lower edge to a second bend.

However, However, Bachhofer discloses (DE19939180 DERWENT Abstract, title, lines 7-10) a cylinder container tank formed by sheet strip and the sheet strip is spirally formed where the both edges are bent and folded and are welded at the butt line (Fig. 3a and Fig. 3b).

It would have been obvious for one having ordinary skill in the art at the time the invention was made to modify McFatter by bending the bottom edge and folding it with the first bent of top edge before welding as disclosed by Bachhofer in order to provide

more stability to the joints with the folds, in addition to the welding, against liquid penetration.

Since McFatter already discloses a roller track 30c which is a cooperation between bottom edge and first bend [McFatter fig. 5]. After modification, the roller track of McFatter would look like the fold 25 which is a cooperation between first and second bends [Bachhofer, fig. 3b]. Also wherein the roller track has two opposing roller track sides spaced apart to accommodate rollers that can engage the roller track and support the tank wall as it is being constructed;



Bachhofer, Fig. 3b

McFatter also discloses rotating the tank wall about its longitudinal axis on the rollers such that the tank wall moves upwards as [column 3 lines 30-50].

Application/Control Number: 10/599,876

Art Unit: 3725

In regard to **claim 28**, see McFatter [fig. 1, 30 and 32]. In regard to **claim 29**, McFatter discloses the sheet metal being corrugated or bent into folds before welding [figs. 3-4]. In regard to **claim 30**, see McFatter column 3 lines 30-50. In regard to **claim 31**, see McFatter figure 7 motor 47. In regard to **claim 32**, see McFatter column 1 line 59. In regard to **claim 33**, see Bachhofer attached figure 3b on last page. In regard to **claim 38**, see McFatter abstract. In regard to **claim 39**, see McFatter abstract.

Page 8

In regard to **claim 40**, McFatter discloses a decoiler [fig. 1, 30 and 32], a bender/corrugator for first bend [36b, figs. 3 and 4], a support system having rollers for moving the sheet metal along a helical trajectory [43, and rollers 45a and 45b, fig. 7], a welding positioner and welder [column 3 lines 30-50].

McFatter discloses the claimed invention substantially, but he does not disclose a bender for bending the lower edge to a second bend.

However, However, Bachhofer discloses (DE19939180 DERWENT Abstract, title, lines 7-10) a cylinder container tank formed by sheet strip and the sheet strip is spirally formed where the both edges are bent and folded and are welded at the butt line (Fig. 3a and Fig. 3b; bended by benders 9 and 10 of fig. 2).

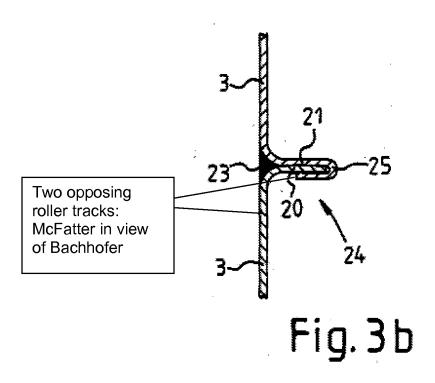
It would have been obvious for one having ordinary skill in the art at the time the invention was made to modify McFatter by bending the bottom edge and folding it with the first bent of top edge before welding as disclosed by Bachhofer in order to provide

more stability to the joints with the folds, in addition to the welding, against liquid penetration.

Since McFatter already discloses a roller track 30c which is a cooperation between bottom edge and first bend [McFatter fig. 5]. After modification, the roller track of McFatter would look like the fold 25 which is a cooperation between first and second bends [Bachhofer, fig. 3b].

Page 9

Also wherein the roller track has two opposing roller track sides spaced apart to accommodate rollers that can engage the roller track and support the tank wall as it is being constructed;



Bachhofer, Fig. 3b

Art Unit: 3725

McFatter also discloses rotating the tank wall about its longitudinal axis on the rollers such that the tank wall moves upwards as [column 3 lines 30-50].

In regard to claims 41-42 and 44, see Bachhofer fig. 3a. In regard to claim 43, decoiler [fig. 1, 30 and 32. In regard to claim 45, see McFatter column 3 line 61. The sheet metal has a thickness of 0.25 inch or 6.35mm. And Fig. 5 discloses that the roller track below 30c is more than the thickness of the sheet metal. In regard to claim 46, McFatter discloses the sheet metal being corrugated or bent into folds before welding [figs. 3-4]. In regard to claim 47, see McFatter figure 7 motor 47. In regard to claims 48-50, see McFatter [column 3 lines 30-55].

6. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to 27 above, and further in view of McFatter (US 4,121,747).

In regard to **claims 36-37**, McFatter does not disclose cutting the top or bottom of the tank. However, McFatter in his different patent disclosure discloses cutting of top and bottom of the tank [McFatter, US 4121747, column 6 lines 19-25]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify McFatter by cutting the top and bottom edge of the tank as suggested by also McFatter in his different patent disclosure in order to be able to place it on a horizontal floor on either end with stability.

Art Unit: 3725

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD YUSUF whose telephone number is (571) 270-7487. The examiner can normally be reached on Monday-Friday 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dana Ross/ Supervisory Patent Examiner, Art Unit 3725

/MOHAMMAD YUSUF/ Examiner, Art Unit 3725